

REMARKS/ARGUMENTS

Claims 1-37 are pending in the present application and stand rejected. Claims 1-4, 6-16, 18-28 and 30-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,687,225 to Kawarai et al. (hereinafter "Kawarai") in view of U.S. Patent No. 6,404,737 to Novick et al. (hereinafter "Novick"). Claims 5, 17, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawarai in view of Novick in further view of U.S. Patent No. 5,966,163 to Lin et al. (hereinafter "Lin"). New claim 38 is added. Support for claim 38 is found, among other places, at page 12 of the substitute specification. No new matter has been added.

Claim 1

Claim 1 recites, in part, "determining an appropriate insertion scheme for carrying out the insertion request, wherein the appropriate insertion scheme includes a first insertion scheme configured to send the insertion request using a first indicator that the empty memory cell should be shaped using predetermined shaping parameters and a second insertion scheme configured to send the insertion request using a second indicator that the empty memory cell should be unshaped."

According to the examiner, Kawarai teaches "determining an appropriate insertion scheme for carrying out the insertion request" at column 19, lines 7-23. See, Office Action at p. 4. Applicants respectfully disagree. The portion of Kawarai cited by the examiner merely lists alternative ways of using counters to insert empty cells. For example, Kawarai indicates that empty cells can be inserted when a single scheduling counter has expired. Empty cells can also be inserted when none of the scheduling counters have expired. Kawarai at col. 19, lines 10-23.

These alternative timing mechanisms are part of a discussion of different approaches to bandwidth allocation. Kawarai discloses that bandwidth can be allocated for empty cells either separately or in the aggregate with user cells. Kawarai at col. 19, lines 1-7.

The scheduling counters are used to implement these alternative approaches. However, the scheduling counters do not decide which bandwidth allocation method will be used.

According to Kawai, a "user declaration" determines which method of allocating bandwidth is used. Kawai at col. 19, line 4. As best understood, the "user declaration" is part of the device configuration. Thus, the choice of bandwidth allocation methods for empty cells is predetermined and not based upon the insertion request. For this reason, Kawai does not teach or suggest "determining an appropriate insertion scheme for carrying out the insertion request" as this limitation is recited above.

Novick's queuing system does not cure the deficiencies of Kawai's counter configuration. In Novick, user cells are first stored in dynamic buffers and later moved into priority queues according to their respective VP contracts. See, Abstract. There is no discussion of empty cell insertion requests or how such requests might be handled.

Thus, in the combination of references, Novick presents cells to a scheduler according to their VP contract and Kawai provides the empty cell insertion mechanism. As previously indicated, Kawai's empty cell insertion mechanism is based on user selection. Accordingly, Kawai in view of Novick does not teach or suggest "determining an appropriate insertion scheme for carrying out the insertion request" as recited above. Applicants respectfully request reconsideration and allowance of claim 1.

Claims 13 and 25

Claims 13, 25 and 37 were rejected under the same rationale as claim 1 and are believed allowable over the combination of references for the reasons given above. Applicants request withdrawal of the rejection of claims 13 and 25.

Claims 2-12, 14-24, 26-36

Claims 2-12, 14-24, and 26-36 depend from claim 1, 13, and 25 respectively. These dependent claims derive patentability, at least, from their respective base claims and are therefore believed allowable over the cited references.

Claim 37

Claim 37 was rejected under the same rationale as claims 1, 13, and 25.

Applicants believe that claim 37 may have been inadvertently grouped with the other claims as it includes unique limitations. Specifically, claim 37 recites, in part, "wherein the insertion of the empty memory slot into the data flow is performed before shaping of the data flow." Applicants respectfully submit that neither Kawai nor Novick disclose this limitation and, therefore, request reconsideration and allowance of claim 37.

New claim 38

New claim 38 is believed to be patentable over the cited references. For example, "receiving insertion requests for empty memory cells to be inserted into the data flow from a plurality of requesting sources; identifying a priority insertion request based upon the requesting source" is not disclosed in the cited references.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 650-326-2400.

Respectfully submitted,



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